

DEPARTMENT OF ARMY
HEADQUARTERS, UNITED STATES ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001

AMC REGULATION
No. 37-4

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Financial Administration

VALIDATION OF COST AND ECONOMIC ANALYSES

Issue of supplements to this regulation by subordinate commands is prohibited unless prior approval is obtained from the proponent.

	Paragraph	Page
Purpose	1	1
Scope	2	1
Explanation of terms	3	1
Policy	4	2
Responsibilities	5	2
Procedures	6	3
APPENDIX A. Criteria for Validation.....		A-1
B. References		B-1
GLOSSARY	GLOSSARY-1	

1. **Purpose.** This regulation prescribes the policies, responsibilities, and procedures for validation of cost and economic analyses within the U.S. Army Materiel Command (AMC). Army Regulation 11-18, The Cost and Economic Analysis Program, requires validation of cost and economic analyses and other cost comparisons to ensure their currency, reasonableness, and completeness for use in decision-making or the Planning, Programming, Budgeting, and Execution System.

2. **Scope.** This regulation applies to Headquarters (HQ) AMC; AMC major subordinate commands (MSC) and program executive officers/program, project, product managers (PEO/PM) assigned to these organizations; and installations and activities reporting directly to HQ AMC. It also prescribes procedures for participation in the validation of cost estimates prepared by AMC-supported PEOs/PMs.

3. **Explanation of terms.** *Validate.* To evaluate a cost estimate to confirm that it is sound, obtained with the use of acceptable cost estimating methods and founded on fact or capable of being justified, supported, and defended.

*This regulation supersedes AMC-R 37-4, 4 June 1987.

4. **Policy.** a. Effective management and allocation of Army resources require that verified, validated, and coordinated cost estimates and economic analyses (EA) be furnished in response to the many requests for cost data. Cost estimates or analyses prepared by HQ AMC or MSCs shall be validated before officially releasing them to higher or lateral headquarters and/or outside AMC.

b. MSC Cost Analysis Offices will support Cost Analysis Integrated Product Teams (CAIPT) for weapon/materiel systems within their purview.

c. When cost estimates involve a validation by more than one MSC, the Cost Analysis activity of the Command with lead management responsibility will coordinate the validation process with Cost Analysis activities of the other concerned Commands. The lead activity will assure there are no duplications or omissions and will verify that compatible methodology is used. Validation support will be provided by the Cost Analysis activity of the other Commands, as requested.

d. When cost estimates or economic analyses are prepared by separate reporting activities (SRA), validations are also required and must be performed by a Cost Analysis activity. The appropriate activity could either be colocated at the SRA or could be part of an MSC colocated or in the same general geographic area as the SRA.

e. Validation of cost estimates and economic analyses should be done concurrently with the estimating process and planned to support the needs and time constraints of decision-makers.

5. **Responsibilities.** a. The Deputy Chief of Staff for Resource Management (DCSRM), HQ AMC will--

(1) Direct and review the commandwide validation program to include developing and issuing appropriate guidance for its conduct and operation; and

(2) Maintain a review capability within HQ AMC to coordinate and verify cost documents prepared by functional offices and AMC PMs for use outside AMC.

b. The commander of each AMC MSC will provide for the operation of a Cost Analysis activity within the intent of this regulation and establish internal policies and procedures to accomplish the mission. For validating cost estimates and economic analyses, or exemption statements (from economic analysis requirements), Cost Analysis activities will--

(1) Operate as focal points for review and validation of cost estimates and economic analyses;

- (2) Maintain a validation log procedure;
- (3) Develop standards and techniques for validating cost estimates and economic analysis submissions;
- (4) Provide results of the review and validation of submissions to the proponent office with comments on areas requiring correction or improvement; and
- (5) Ensure that validated cost and economic analysis documents bear the validation stamp of the Cost Analysis activity.

c. Commanders, PEOs, PMs, and functional directors will--

- (1) Ensure timely submission of cost estimates and cost-oriented documents for review and validation prior to submission to other commands/activities;
- (2) Ensure that the cost document is arithmetically correct and that charts, graphs, and figures reconcile with each other; and
- (3) Ensure that rationale and documentation are submitted in a clear and logical manner and are provided with the cost estimate or economic analysis at time of submission for validation.

d. CAIPTs will--

- (1) Ensure that life cycle cost estimates developed and used by the team satisfy the validation criteria in appendix A;
- (2) Tailor internal validation processes and procedures to complement the efforts of CEAC and the Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG);
- (3) Include description/documentation of activities and analyses conducted in support of validation in reports and presentations discussing the estimate.

6. **Procedures.** a. For Cost Estimates prepared by a CAIPT--

- (1) The DA Cost Analysis Manual provides procedures for the Army Cost Review Board (CRB) and for CAIPTs. The CRB will identify a process option for each weapon/materiel system cost estimate based on cost risk and uncertainty. Options include validation, a tailored CRB working group (CRBWG), or a full CRBWG. The Integrated Product Team (IPT) will tailor its validation effort to fit the selected option, recognizing that it is ultimately the responsibility of the IPT to convince the CRB that the estimate is credible.

(2) Where validation is the chosen option, the procedures in paragraph 6.b. will be followed. Most AMC-managed systems will fall in this category.

(3) For the tailored CRBWG option, those portions of the estimate not subjected to scrutiny by the CRBWG will be validated.

(4) For the full CRBWG option, the IPT representatives from AMC, CEAC, and the OSD CAIG will, while helping to prepare the estimate, maintain an independent perspective to ensure the estimate meets the validation criteria.

(5) If any IPT member has an issue with the estimating methodology during the estimating process, the issue should first be raised with the IPT. If the issue cannot be resolved by the IPT, it should be presented to the member's CRB principal. The CRB principal will then ensure that the issue is resolved.

b. Procedures for all other cost estimates and analyses--

(1) All cost estimates and economic analyses will be submitted to the MSC Cost Analysis activity and validated before their submission to higher or other headquarters. Prior to release from HQ AMC, cost estimates and economic analyses will be reviewed by the Cost Analysis Division, DCSRM, HQ AMC.

(2) Cost estimates and submissions will be marked with an official stamp on the face of the document or other conspicuous location to express concurrence after review if the validation requirements are met. The stamp will display the following:

- Name of Cost Analysis activity;
- Cost Analysis activity control number;
- Signature of validation analyst;
- Signature or initials of supervisor (except in those instances where the validation is performed away from the analyst's home station);
- Phone number for a point of contact;
- Date of validation;
- Date the validation expires; and
- Any remarks by the validating analysts.

(3) A document that does not meet the validation requirements is not justified and should be returned to the proponent without being stamped. In this case a validation review sheet stating the reasons validation is not justified should be provided to the proponent with the document, to include--

- Name of Cost Analysis activity;
- Title and date of document;
- Name and phone number of analyst responsible for the review;
- Reasons for return of cost document including nonconcurrence; and
- Signature of supervisor.

(4) Cost and economic analyses transmitted electronically must include the same validation information as on the official stamp on the last page of the transmission. A log number MUST be included (see paragraph 6.b.(7)). In lieu of signatures, the names of the validator and supervisor are to be entered.

(5) An exemption statement used in lieu of an economic analysis will be submitted to the appropriate Cost Analysis activity to determine if the exemption criteria contained in the DA Economic Analysis Handbook has been met. Requirements for validation of supporting economic analyses or exemption statement include, but are not limited to, the following types of projects:

- Military construction;
- Production base support;
- Productivity capital investments;
- Operating and Support Cost Reduction (OSCR) projects;
- Organization studies (i.e., realignments and relocations);
- Management information systems/studies; and
- Army incentive awards program (for cash awards representing tangible benefits greater than \$350,000).

(6) An expiration date, not to exceed 12 months from the date of validation, will be posted on the validation stamp. If further use of the document is needed subsequent to the expiration date, it must be returned to the originator who will identify whether any significant changes have occurred. If there are none, the document will be revalidated. If there are significant changes or a new analysis is submitted, a new validation will be required prior to official use of the document.

(7) Each MSC Cost Activity will maintain a complete validation logbook of all cost submissions processed, containing--

- Date cost document was received for validation;
- Type of document reviewed;
- Title/description;
- Document date and number;
- Requester;
- Suspense date, if applicable;
- Date reviewed/validated;
- Control/validation number;
- File reference number (containing document and back-up data) or log number;
- Remarks (validation qualification, exceptions, etc.).

The proponent of this regulation is the United States Army Materiel Command. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, HQ AMC, ATTN: AMCRM-E, 5001 Eisenhower Avenue, Alexandria, VA 22333-0001.

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APPENDIX A

Criteria for Validation

A valid cost estimate or economic analysis meets the following criteria:

1. **Study framework:**

- Defines a clear and specific objective unconstrained by any specified ways to accomplish it;
- Addresses all feasible alternatives;*
- Is based on logical, realistic, and justified assumptions, including implicit assumptions;
- Accurately represents program requirements, plan, and schedule;
- Describes complete resource needs, by appropriation, year, and cost category;
- Contains adequate detail to enhance understanding of total cost impacts of potential trade-offs; and
- Clearly defines benefits, quantified whenever possible.*

2. **Methodology:**

- Is appropriate for available information, continuously updated as more specific knowledge and actual costs become available;
- Develops estimates based on elements that drive cost;
- Relies on methodology, data and analysis free of proponent bias;
- Correctly uses quantitative techniques and cost estimating methods;

*Requirement for Economic Analyses.

- Is an integrated document with internal consistency; compatible between and among cells;
- Applies proper inflation and discounting;*
- Recognizes uncertainty and risk and includes resources for dealing with reasonable variations from optimal expectations; and
- Appropriately analyzes and ranks alternatives.*

3. Documentation:

- Contains adequate discussion to allow other analysts to understand what has been included or excluded;
- Identifies limitations of methodology;
- Describes the source and derivation of all cost information;
- Avoids excess precision;
- Demonstrates that costs have been thoroughly investigated and are well understood; and
- Persuades an independent reviewer to reach the same conclusion.

APPENDIX B

References

DODD 5000.1, Defense Acquisition
DODI 5000.2-R, Mandatory Procedures for MDAPS and MAIS
Acquisition Programs
DODD 5000.4, OSD Cost Analyses Improvement Group
DODD 5000.4-M, Cost Analysis Guidance and Procedures
DOD 7000.14-R, DOD Financial Management Regulation (15 vols)
DODI 7041.3, Economic Analysis for Decision Making
DODI 8000.1, Defense Information Management Program
AR 5-4, Department of the Army Productivity Improvement Program
AR 11-18, The Cost and Economic Analysis Program
AR 15-14, Systems Acquisition Review Council Procedures
AR 70-1, Army Acquisition Policy
DA Pamphlet 70-3, Army Acquisition Procedures
DA Economic Analysis Manual (July 1995)
DA Cost Analysis Manual
AMC-P 70-27, vol. 3, Guidance for Integrated Produce and Process
Management - Tools and Practices

GLOSSARY

Acronyms

AMC	-	U.S. Army Materiel Command
CAIG	-	Cost Analysis Improvement Group
CAIPT	-	Cost Analysis Integrated Product Team
CEAC	-	U.S. Army Cost and Economic Analysis Center
CRB	-	Cost Review Board
CRBWG	-	Cost Review Board Working Group
DA	-	Department of the Army
DCSRM	-	Deputy Chief of Staff for Resource Management
EA	-	Economic Analysis
HQ	-	Headquarters
IPT	-	Integrated Product Team
MSC	-	major subordinate command
OSCR	-	Operating and Support Cost Reduction
OSD	-	Office of the Secretary of Defense
PEO	-	program executive officer
PM	-	product manager
SRA	-	separate reporting activity